International Harmonized Research Activities Working Group on Intelligent Transport Systems Draft Terms of Reference for 2001-2003

Mandate

The long-term mandate of the Working Group is to coordinate international policy-oriented research to minimize the potential adverse consequences of on-board ITS technologies.

The WG has proved to be a useful forum for the exchange of research plans, information, policies and trends among participating countries. It is the only such forum that exists with the express purpose of coordinating government research in this area. It is anticipated that increased public and government concerns about ITS safety in the future will stimulate increased interest, expectation and funding of harmonized research. As the workload of the WG increases there may be a need in the future to form sub-groups to address specific challenges associated with ITS safety.

Term:

As ITS technologies continue to evolve, there will be an increasing need for governments to monitor the safety of these systems and to adapt policies to respond to public expectations. The work of the WG is, therefore, envisioned as on-going, with periodic review and refocus on specific areas of interest. For purposes of this draft, however, the nominal term is two years.

Mission and objectives

The long-term goal of the Working Group is to develop procedures for the evaluation of safety of in-vehicle information, control and communication systems. The principal objective for the next two years, however, is to provide an international view of the state of research into understanding the safety impact of driver workload and distraction.

Scope

The scope of ITS equipment includes original and aftermarket on-board information and communication systems. These include telematics, driver assistance systems and collision warning and avoidance systems. The initial focus is telematics, due to concern over the increased risk associated with driver distraction.

Action Plan

Several projects are currently underway. Specific outputs from these projects are outlined below.

- Publish a compendium concerning the safety impact of driver workload and distraction, consolidating input on this topic from all participating countries. The compendium would include sections on analytical framework, methodologies, test results, and analytical results. The information will be collected and rated along a number of dimensions, culminating in a workshop. In future activities, this compendium will be reviewed by the WG with the view to making recommendations about methodologies.
- Update database of current test and evaluation of on-board ITS systems

- Canadian research investigating the effects of violation of expectations will be shared with other members of the WG. Information concerning EC projects RESPONSE II, concerned with safety, legal and other matters, will be shared, to the extent permissible.
- NHTSA's research to collect normative data on naturalistic driving will be monitored, especially techniques for evaluating large amounts of such data.
- Hold a workshop to determine the merit and feasibility of establishing simulator reference test scenarios. The possibility of holding the workshop in conjunction with the First Human-Centred Transportation Simulation Conference to be held November 4-7, 2001, in Iowa will be explored.
- Current German-Swedish joint studies on driver workload will be published, as well as Japanese and joint Canadian-U.S. studies. A special session on driver-vehicle interaction, which might include driver workload, will be proposed for the next ESV conference to be held in Nagoya.
- Explore the possibility of personnel exchanges, (cross industry-government, etc.) as a further form of collaboration.
- The scope of the WG will be reviewed and an expansion into new areas will be elaborated. The need for sub-groups will be considered.
- Other relevant government research will be shared among WG members.

Meetings

Project leaders will coordinate project activities. Two-day WG meetings will be held semi-annually. The format will include focused roundtable discussions by members of the group (and invited experts when appropriate) to address specific issues.

Deliverables, results

The results of these projects will be shared among WG members as they become available. The compendium described above as well as other reports would be published and posted on the ITS web site.

A status report summarizing activities during the period 2001-2003 will be made at ESV'2003 in Nagoya. An interim report will be submitted to the Steering Committee in 2002.